

ABSTRACT OF THE DISCLOSURE

[0053] Methods and systems for automatic optimization in spectral Doppler ultrasound imaging are provided. The value for one or more spectral Doppler parameter is optimized using numerical optimization rather than predefined sampling. Various spectral Doppler parameters are set, such as a position of the gate, gate size, transmit frequency, filter settings, Doppler gain, beamline orientation or angle of intersection between the gate position and the scan line, aperture size, or other spectral Doppler transmit or receive parameters effecting the spectral Doppler imaging. A processor automatically calculates a setting or value for one or more of the spectral Doppler parameters, resulting in more objective optimization than provided by a user setting.